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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/617,599 | 07/11/2003 | Jean-Marie R. Dautelle | RTN-171AUS | 2932 |
| 33164 | 7590 | 12/27/2005 | EXAMINER | |
| RAYTHEON COMPANY C/O DALY, CROWLEY, MOFFORD & DURKEE, LLP 354A TURNPIKE STREET SUITE 301A CANTON, MA 02021 | | | BRIER, JEFFERY A | |
| | | ART UNIT | | PAPER NUMBER |
| | | 2672 | | |
| DATE MAILED: 12/27/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------|-------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/617,599 | DAUTELLE, JEAN-MARIE R. |
| | Examiner | Art Unit |
| | Jeffery A. Brier | 2672 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 October 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-23 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 10/03/2005 has been entered. The amendments to the specification and to the drawings overcome the formal objections made to the specification and to the drawings. The amendments made to claim 15 overcome the 112 second paragraph rejection of claims 19 and 20. The amendments made to claims 1, 8, and 15 overcome the 101 rejection of claims 1-20.

Response to Arguments

2. Applicant's arguments filed 10/03/2005 have been fully considered but they are not persuasive. The amendment to claims 1, 8, and 15 do not overcome the 102 rejection based upon the JAZZ article because the specification does not define "graphics circuit module". The specification does describe placing the scene graph in a "3D graphics circuit board" or in a "three-dimensional graphics circuit card (3DGC)". The described boards are not the same as the newly claimed "graphics circuit module" and the newly claimed "graphics circuit module" includes a graphics program running on a CPU. Therefore, the claims are still taught by the JAZZ article. See *In re Chatfield*, 191 USPQ 730, 738 (CCPA 1976) which describes a program running on a computer as an electrical circuit. It stated on page 738:

In the first such case, *In re Prater*, *supra*, we had both process or method and apparatus or machine claims. It was in that case that we stated an incontrovertible fact and a principle of patent law which, until recently, we have consistently since followed, to the effect that a new program makes an old computer into a new machine, as follows:

In one sense, a general-purpose digital computer may be regarded as but a storeroom of parts and/or electrical components. But once a program has been introduced, the general-purpose digital computer becomes *a special-purpose digital computer* (i.e., a specific ~~electrical circuit~~ with or without electro-mechanical components) which, along with the *process* by which it operates, may be patented subject, of course, to the requirements of novelty, utility, and non-obviousness. *Based on the present law, we see no other reasonable conclusion.* [Footnote 29. Emphasis mine.]

We applied that principle in a long line of cases that came to us as a result of the policy of the Patent Office to deny patentability to program inventions on the ground of nonstatutory subject matter — and on any other ground it could find.

Therefore, applicant needs to amend the claims to more specifically claim a "3D graphics circuit board" or in a "three-dimensional graphics circuit card (3DGC)" to overcome the 102 rejection and applicant needs to provided strong rationale with regards to nonobviousness of porting a JAVA 2D program to a "3D graphics circuit board" or in a "three-dimensional graphics circuit card (3DGC)". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant intends to rely upon (i.e., "3D graphics circuit board" or "three-dimensional graphics circuit card (3DGC)" are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The arguments concerning the 103 rejection are not persuasive because the main reference teaches the argued graphics circuit module claim limitation.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6-9, 13-16, and 19-23 are rejected under 35 U.S.C. 102(b) as being anticipaged by the article titled *Jazz: An Extensible Zoomable User Interface Graphics Toolkit in Java* by Benjamin B. Bederson, Jon Meyer, Lance Good.

This article discusses scene graphs generating 2D images, 3D images, widgets, graphs, scenes, and text. This article may be found at:

<http://citeseer.ist.psu.edu/bederson00jazz.html>

<http://portal.acm.org/citation.cfm?id=354754&coll=ACM&dl=ACM&CFID=46921808&CF TOKEN=68192717>

<http://www.cs.umd.edu/hcil/jazz/learn/papers/HCIL-2000-13.pdf>

<http://www.cs.umd.edu/hcil/jazz/learn/publications.shtml>

Applicant alleges on page 8 lines 8-12: [0040] Also, existing scene graph APIs provide three-dimensional (3D) graphical objects and corresponding 3D images on a graphical display in particular software environments, for example, in computer games. However, scene graphs have not been applied to other software environments, for example, two-dimensional (2D) desktop applications having combinations of 2D

windows, 2D text, and 2D graphics. However, the prior art supplied by the examiner proves this allegation concerning 2D windows, 2D text, and 2D graphics to be incorrect.

A detailed analysis of the claim follows:

Claim 1:

The Jazz article teaches a computer implemented method (*The JAZZ program is implemented on a computer.*) of providing a graphical display for a desktop application (*Page 177 in the section under the title Creating Application Specific Widgets describes various desktop applications of Jazz.*), comprising:

generating scene graph data (*Page 173 discusses the JAZZ toolkit which develops ZUI application by using scene graphs.*), the scene graph data including at least one two-dimensional object (*Page 171 in the abstract, page 173 in the second column first paragraph, and page 174 discuss two dimensional objects and 2D scene graphs representing the 2D objects.*), the scene graph data adapted to be stored in a graphics circuits module (*The program as whole may be considered a graphics module.* As discussed above a CPU running a program is a circuit, thus, JAZZ forms the CPU into a graphics circuit module.) capable of generating the graphical display (*Inherently*

the scene graph needs to be stored in order for the computer to use the scene graph to generate the 2D object's image.); and

generating a scene graph display command (Inherently a command is present that causes the computer to read the stored scene graph in order to process the scene graph into an image of the 2D object.) associated with the at least one two-dimensional object, the scene graph display command adapted to be interpreted by the graphics circuit module (As discussed above a CPU running a program is a circuit, thus, JAZZ forms the CPU into a graphics circuit module.) resulting in at least one two-dimensional image on the graphical display, wherein the at least one two-dimensional image is associated with the at least one two-dimensional object (The scene graph corresponding to a two dimensional object is used by the computer to generate an image corresponding to the two dimensional object.).

Claim 2:

The Jazz article teaches the method of claim 1, wherein the generating the scene graph display command includes:

receiving object data (name of the object is object data.) associated with a selected one of the at least one two-dimensional object; and associating the object data (Associating the name of the object with the scene graph that generates the image.) with the selected one of the at least one two-dimensional object to provide the scene graph display command (The command that

causes the computer to execute the scene graph would refer to the name of the scene graph. Refer to pages 174-176 under the heading Architecture.).

Claim 6:

The Jazz article teaches the method of claim 1, wherein the generating the scene graph data includes generating the scene graph data associated with at least one two-dimensional object and with at least one three-dimensional object (*In the section under the heading The JAZZ Toolkit found on pages 173-174 the article discusses 3D and 2D images generated by JAZZ.*).

Claim 7:

The Jazz article teaches the method of claim 1, wherein the scene graph data includes at least one text object (*On page 173 second column first paragraph the Jazz article teaches fonts which are text and characters and on page 171 in the introduction text areas are discussed and figure 1 shows an image of text objects displayed to the user in the HiNote snapshot.*), the at least one two-dimensional object includes at least one text character, and the at least one two-dimensional image includes at least one text character image.

Claims 8 and 15:

These claims correspond to method claim 1 and are rejected for the reasons given for claim 1. Since Jazz is a JAVA program it inherently has computer program medium having computer readable code and it inherently teaches using a computer to execute the program.

Claims 9 and 16:

These claims correspond to method claim 2 and are rejected for the reasons given for claim 2.

Claims 13 and 19:

These claims correspond to method claim 6 and are rejected for the reasons given for claim 6.

Claims 14 and 20:

These claims correspond to method claim 7 and are rejected for the reasons given for claim 7.

Claims 21-23:

21. (New) The method of Claim 1, further including storing the scene graph data in the graphics circuit module.

22. (New) The computer program medium Claim 8, further including instructions for storing the scene graph data in the graphics circuit module.

23. (New) The system of Claim 15, wherein the scene graph data is adapted to be stored in the graphics circuit module.

These claims are taught by JAZZ because inherently the scene graph needs to be stored in order for the computer to use the scene graph to generate the 2D object's image.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-5, 10-12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the article titled Jazz: An Extensible Zoomable User Interface Graphics Toolkit in Java by Benjamin B. Bederson, Jon Meyer, Lance Good in view of applicants admission of the prior art.

Claims 3, 10, and 17:

Each of these dependent claims claim wherein the object data is provided by a radar system and is associated with at least one of an aircraft and a geographic feature.

Jazz does not mention these specific object images, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft and geographic feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft and geographic features. It would have been

obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft and geographic images with 2D scene graphs because these images require no different graphics generation than the images specifically discussed by Jazz.

Claims 4, 11, and 18:

Each of these dependent claims claim wherein the at least one two-dimensional object represents an aircraft.

Jazz does not mention this specific object image, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft images with 2D scene graphs because these images require no different graphics generation than the images specifically discussed by Jazz.

Claims 5 and 12:

Each of these dependent claims claim wherein the generating the scene graph data includes generating the scene graph data including at least one of a first two-dimensional scene graph data portion representing a land geography, and a second two-dimensional scene graph data portion representing one or more aircraft.

Jazz does not mention these specific object images, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft and geographic feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft and geographic features. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft and geographic images with 2D scene graphs because these images require no different graphics generation than the images specifically discussed by Jazz.

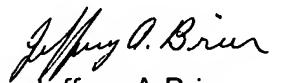
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steele teaches generating a 2D scene graph, see figure 7.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffery A Brier
Primary Examiner
Art Unit 2672